



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

646.4001
Job Sheet 169966



Part No: 646.4001

Job Qty: 1 ea

Part Name: AS350 Cable Cutter System



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/5/18

Job Tracking No:

Due Date: 2/9/18

Created By: Mario Poulin

Type: SOLD

Description:

Customer: Heli Austria GMBH (CHAUS03)

Heliport A-5600 Street, PG Johann, A-5600 Austria ph:43 6462 4200 fx:43 (0) 6462 4200 42.

Note: DWG REV C1 IPP REV:A 12.10.23 NEW ISSUE DD VERF:JLM IPP REV:B 15.01.08 AS PER DWG REV.B
DD VERF:JLM IPP REV:C 16.01.07 AS PER DWG REV.C DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		2/9/18	0.00	0.00	Start Up Stores/Pkg-1		
110	Packaging	1 pcs		2/9/18	0.00	0.00	Packaging1-1		
120	QC	1 pcs		2/9/18	0.00	0.00	QC4		
125	DC	1 pcs		2/9/18	0.00	0.00	DC		
130	Packaging	1 pcs		2/9/18	0.00	0.00	Packaging3-1		
140	QC21-FG	1 Ea		2/9/18	0.00	0.00	QC21		

Part Op 125 - Photocopy bluefile & type labels per PPP 646.4001

Descriptions: 130 - Identify and pack for shipping as per PPP 646.4001 Location: Fg102

DAS 21
21
9-09 JAN 30 2018

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	600.0129 5031279	8	336	0	0
	600.0990 5031276	1	25	0	0
	600.0991 5034275	1	27	0	0
	600.1012 5031280	1	55	0	0
	600.1013 5031278	5	105	0	0
	646.2910 5031273	1	12	0	0
	646.3001 5031272	1	4	0	0
	646.3110 5031270	1	7	0	0
	646.3210 5031269	1	11	0	0
	646.3301 5031268	1	5	0	0
	646.3510 F159848	1	9	0	0
	646.3511 5031265	1	7	0	0
	646.3610 5031264	1	22	0	0
	646.3710 5031262	1	29	0	0
	646.3711 5031260	1	17	0	0
	646.3712 5031258	1	31	0	0
	646.3713 5031253	1	27	0	0
	646.3714 5031218	1	29	0	0
	646.3715 5031216	2	44	0	0
	646.3716 5031214	1	24	0	0
	646.3717 5031212	1	29	0	0
	646.3718	2	40	0	0
	646.3719 5006172	2	18	0	0

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

DNE

S:



Qty

Qty

646.3810	50 31209	2	17	0	0
646.3811	50 31206	1	14	0	0
646.3812	50 31188	2	13	0	0
646.3813	50 32802	1	12	0	0
646.3910	50 31199	1	40	0	0
646.3911	50 31194	1	18	0	0
646.3912	50 32501	1	42	0	0
646.3913	50 31161	1	32	0	0
646.9410	50 30189	1	36	0	0
647.0112	50 31187	2	141	0	0
647.7703	50 31185	2	18	0	0
650.9201	50 37046	2	21	0	0
AN3-11A	50 30743	10	583	0	0
AN3-12A	50 30738	2	90	0	0
AN3-13A	50 30735	1	24	0	0
AN3-3A	50 30732	4	399	0	0
AN3-4A	50 30727	10	467	0	0
AN3-5A	50 30721	2	455	0	0
AN3-6A	50 30715	2	252	0	0
AN316C4R	50 30709	2	64	0	0
AN44-5A	50 30702	2	33	0	0
AN4C7A	50 30698	2	163	0	0
AN665-34R	50 30684	2	78	0	0
CCR264SS3-02	50 30683	36	580	0	0
CR3213-5-3	50 30677	14	331	0	0
MS20426AD5-7	50 30674	2	1,291	0	0
MS20470AD5-5.5	50 30587	8	501	0	0
MS20470AD5-6	50 30586	8	375	0	0
MS20470AD5-7	50 30585	3	245	0	0
MS21042L08	50 30583	2	0	0	0
MS21042L3	50 30580	63	3,336	0	0
MS21042L4	50 30578	2	3,678	0	0
MS21047-3	50 30577	18	788	0	0
MS24693-C278	50 30575	5	130	0	0
MS24694-S51	50 30573	5	513	0	0
MS24694-S54	50 30570	2	228	0	0
MS24694-S55	50 30489	3	129	0	0
MS27039-08-13	50 30488	2	545	0	0
MS27039-1-10	50 30487	2	449	0	0
MS27039-1-12	50 30481	6	269	0	0
MS27039-1-16	50 30478	24	500	0	0
MS27039-1-19	50 30472	22	426	0	0
MS27039-1-20	50 30467	2	105	0	0
MS27039-1-21	50 30466	4	63	0	0
NAS1149F0332P	50 30462	144	5,721	0	0
NAS1149F0363P	50 30460	2	294	0	0
NAS1149F0432P	50 30459	4	1,363	0	0
NAS1149FN832P	50 30454	4	7,057	0	0

IAN 30

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
Job No: 169966 Operation 01/29/18 Start up Operation Change No: Operation: Revision: Original Serial #: S036450 PART NO: 646.4001 AS350 Cable Cutter System S036450 DART AEROSPACE Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 Canada TEL: 1 613 632-5200 Email: sales@dartaero.com www.dartaerospace.com		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Marks/Chatter ☐ OTHER : _____	DRY ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence		



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1270 Aberdeen St
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Canada

Master Unit 000127

Tel (613) 632-5200

Containers on Master Unit 000127				
Serial No	Part No	Customer Part No	Status	Quantity
S031279	600.0129	600.0129	Allocated	8
S031276	600.0990	600.0990	Allocated	1
S031275	600.0991	600.0991	Allocated	1
S031280	600.1012		Allocated	1
S031278	600.1013	600.1013	Allocated	5
S031273	646.2910	646.2910	Allocated	1
S031272	646.3001		Allocated	1
S031270	646.3110	646.3110	Allocated	1
S031269	646.3210	646.3210	Allocated	1
S031268	646.3301	646.3301	Allocated	1
F159848	646.3510	646.3510	Allocated	1
S031265	646.3511	646.3511	Allocated	1
S031262	646.3610	646.3610	Allocated	1
S031264	646.3710	646.3710	Allocated	1
S031260	646.3711	646.3711	Allocated	1
S031258	646.3712	646.3712	Allocated	1
S031253	646.3713		Allocated	1
S031218	646.3714	646.3714	Allocated	1
S031216	646.3715		Allocated	2
S031214	646.3716		Allocated	1
S031212	646.3717		Allocated	1
S035923	646.3718		Allocated	2
S006172	646.3719		Allocated	2
S031209	646.3810		Allocated	2
S031206	646.3811		Allocated	1
S019908	646.3812	646.3812	Allocated	2
S032802	646.3813		Allocated	1
S031199	646.3910		Allocated	4
S031194	646.3911		Allocated	1
F162501	646.3912		Allocated	4
S031191	646.3913		Allocated	1
S031189	646.9410		Allocated	1
S031187	647.0112	647.0112	Allocated	2

S031185	647.7703	647.7703	Allocated	2
S030743	AN3-11A		Allocated	10
S030735	AN3-13A		Allocated	1
S030732	AN3-3A	AN3-3A	Allocated	4
S030727	AN3-4A		Allocated	10
S030721	AN3-5A	AN3-5A	Allocated	2
S030715	AN3-6A	AN3-6A	Allocated	2
S030709	AN316C4R	AN316C4R	Allocated	2
S030702	AN44-5A	AN44-5A	Allocated	2
S030698	AN4C7A		Allocated	2
S030689	AN665-34R	AN665-34R	Allocated	2
S030683	CCR264SS3-02		Allocated	36
S030677	CR3213-5-3		Allocated	14
S030674	MS20426AD5-7		Allocated	2
S030587	MS20470AD5-5.5		Allocated	8
S030586	MS20470AD5-6	MS20470AD5-6	Allocated	8
S030585	MS20470AD5-7		Allocated	3
S030583	MS21042L08		Allocated	2
S030577	MS21047-3		Allocated	18
S030575	MS24693-C278		Allocated	5
S030573	MS24694-S51		Allocated	5
S030570	MS24694-S54		Allocated	2
S030489	MS24694-S55	MS24694-S55	Allocated	3
S030488	MS27039-08-13	MS27039-08-13	Allocated	2
S030487	MS27039-1-10		Allocated	2
S030481	MS27039-1-12		Allocated	6
S030474	MS27039-1-16		Allocated	24
S030472	MS27039-1-19		Allocated	22
S030467	MS27039-1-20		Allocated	2
S030466	MS27039-1-21		Allocated	4
S030460	NAS1149F0363P		Allocated	2
S030459	NAS1149F0432P		Allocated	4
S030458	NAS1149FN832P		Allocated	4

REFERENCE ONLY

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OR DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE EXPLICIT
WRITTEN PERMISSION OF APICAL INDUSTRIES OR DART AEROSPACE IS PROHIBITED.

NOTES:

1. AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.

2. INSTALL F/N 14 WITH F/N 52 & 53.

3. 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMASTER-CARR P/N 75935A651.

4. 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE.
VENDOR: R.S. HUGHES P/N 021200-24216.

5. REUSE FASTENERS FROM F/N 1.

6. USE WASHERS A/R AS SHIMS TO OBTAIN BEST FITMENT.

7. AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ON TO F/N 1.

8. INSTALL SHIM IF OEM PROVISIONS ARE INSTALLED ON AIRCRAFT, REMOVE
SHIM LAYERS TO ACHIEVE CORRECT SIZE. MATCH DRILL HOLES. USE F/N 78
SCREW IN PLACE OF F/N 17 SCREW.

9. NEWER INSTALLATIONS ON AIRCRAFT WITH UPDATED CANOPY MAY
REQUIRE DIFFERENT LENGTH SCREWS. USE F/N 62 TO REPLACE F/N 44 &
F/N 26 IN PLACE OF F/N 41 WHEN NECESSARY.

UNINCORPORATED ECN(S)

05304

5	5	5	78	601.3875	SCREW	AN6132C4R				
1	1	1	77	646.9410	SHIM	Δ				
	4	4	76	601.2764	WASHER	NAS1149H832P				
	2	2	75	601.2973	LOCKNUT	MS21042-08				
	2	2	74	601.2988	SCREW	MS27039-0813				
	2	2	73	601.2943	LOCKNUT	MS21042-3				
	2	2	72	601.3128	NUT	AN316C4R				
	2	2	71	601.3209	LOCKNUT	MS21042A				
	4	4	70	601.2638	WASHER	NAS1149P0432P				
	2	2	69	601.2669	BOLT	ANAC7A				
	2	2	68	601.3119	CLEVIS	AN665-34R				
	2	2	67	601.3121	EYE BOLT	AN66-5A				
	2	2	66	650.9201	EYE BRACKET ASSY					
REF	REF	REF	65	647.5701	GPS MOUNT KIT	Δ				
		2	64	601.3151	WASHER	NAS1149P0432P				
			63	601.2911	SCREW	MS27039-1-16				
	24	24	62	601.2637	SCREW	MS27039-1-16				
2	2	2	61	601.2763	BOLT	AN3-12A				
	1	1	60	646.3913	SHIM					
	4	4	59	646.3912	SHIM					
	1	1	58	646.3911	SHIM					
	4	4	57	646.3910	SHIM					
	5	5	56	600.1013	PRIMER					
	8 FT	8 FT	55	600.0129	VHB TAPE					
	1	1	54	600.1012	SEALANT	PR-105 CLASS B				
	1	1	53	600.0991	MAGNABOND 699B PART B	Δ				
	1	1	52	600.0990	MAGNABOND 699B PART A	Δ				
6	10	10	51	601.2826	BOLT	AN3-11A				
		2	50	646.3814	WIPER BRACKET					
		2	49	601.2910	SCREW	MS27039-1-16				
	2	2	48	601.1365	SCREW	MS27039-1-10				
	2	2	47	646.3719	DOUBLER					
		2	46	646.3718	CUSTOM WASHER					
	1	1	45	646.3717	DOUBLER					
	22	2	44	601.1948	SCREW	MS27039-1-19				
	2	2	43	601.1952	SCREW	MS27039-1-20				
	4	4	42	601.1956	SCREW	MS27039-1-21				
4006	4005	4004	4003	4002	4001	FIND #	PART #	DESCRIPTION	MATL	SPEC.

REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECN 6279, 6281, 6271 & 6275	03/08/2010	P. BRAVO
B	INCORPORATED ECN 6284, 6277 & 6471	11/04/2011	P. BRAVO
C	INCORPORATED ECN 6285	09/01/2013	P. BRAVO

		2		2	41	601.2829	SCREW	MS27039-1-12		
		2		2	40	601.2831	RIVET	MS20426AD5-7		
		1		1	39	646.3716	GAUGE BRACKET			
		6		6	38	601.1953	SCREW	MS27039-1-12		
	2			2	37	646.3715	STRUT DOUBLER			
	2	2		2	36	601.2824	BOLT	AN3-5A		
12	36			36	35	601.2277	RIVET	CC1944MS 3/8"		
6	18			18	34	600.0795	NUTPLATE	MS21047-3		
3	3			3	33	601.2565	RIVET	MS20470AD5-7		
1	1			1	32	646.3813	STRUT BRACKET			
4	4			4	31	601.2822	BOLT	AN3-3A		
2	2			2	30	646.3812	GUSSET BRACKET			
8	8			8	29	601.2564	RIVET	MS20470AD5-6		
1	1			1	28	646.3714	GUSSET			
	1	1		1	27	646.3610	FILLER			
	3	3		3	26	601.2830	SCREW	MS2449A556		
	2	2		2	25	601.2825	BOLT	AN3-6A		
	1	1		1	24	646.3811	RADIUS BLOCK			
	1	1		1	23	646.3712	CLIP			
	1	1		1	22	646.3711	CLIP			
				8	21	601.2832	RIVET	MS20470AD5-6		
8	8			14	20	601.2020	RIVET	CR3213-5-5		
14	14			4	19	601.2823	BOLT	AN3-4A		
4	6	4	6	10	18	601.2827	BOLT	AN3-13A		
	1	1	1	1	17	601.2912	SCREW	MS2449A551		
	5	5		5	16	646.3713	GUSSET			
	1	1		1	15	646.3710	SUPPORT			
	1	1		1	14	646.3710	DOUBLER			
				1	13	646.3110	CHANNEL			
14	10	8	53	6	12	601.1624	LOCKNUT	MS21042-3		
16	32	18	120	16	11	601.1607	WASHER	NAS1149P0432P		
					10	646.3410	LH WIPER DEFLECTOR			
					9	646.3411	RH WIPER DEFLECTOR			
		2		2	8	647.7703	STRUT ASSY			
		2		2	7	647.0112	STRUT BRACKET			
	1	1		1	6	646.3511	STRUT			
	1	1		1	5	646.3510	STRUT			
2	2			2	4	646.3810	BRACKET			
				1	3	646.2910	DEFLECTOR			
	1	1		1	2	646.3001	LOWER CUTTER ASSY			
		1		1	1	646.3301	UPPER CUTTER ASSY			
X						646.4006	LOWER CUTTER FIXED PROVISIONS			
	X					646.4005	LOWER CUTTER REMOVABLE PROVISIONS			
		X				646.4004	FIXED PROVISIONS KIT			
			X			646.4003	CABLE CUTTERS KIT WITH-OUT FIXED PROVISIONS			
				X		646.4002	ASS350 WIPER DEFLECTOR KIT			
					X	646.4001	ASS350 CABLE CUTTERS KIT			
.4006	.4005	.4004	.4003	.4002	.4001	FIND #	PART #	DESCRIPTION	MATL	SPEC.

QTY		PARTS LIST	
NEXT ASSY (S)		ORIGINAL DATE: 08-27-08 DRAWN BY: S. CRECHER E. HUFF P. BRAVO CHECKED BY: P. BRAVO APPROVED BY: P. BRAVO DATE: 08-27-08	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS: 1/10 3 PLACE DECIMALS: 1/100 4 PLACE: 1/1000		DART 3030 ENTERPRISE CT., SUITE A VISTA, CA 92081 (760)-724-5300 APICAL INDUSTRIES, INC. (HOLDING AIRCRAFT) AS350 CABLE CUTTERS KIT SUPP CHG COM DWD NO. B 07NA16 646.4000 SCALE NONE SHEET 1 OF 5	